

A WEB CUTTING APPARATUS FOR  
USE IN A PAPERMAKING MACHINE

ABSTRACT

5 A water jet cutting apparatus for use in a papermaking machine has  
an elongated support beam that extends across the width of the web. The  
water jet cutting apparatus utilizes a free spinning hose wheel about which  
the water jet hose supplying water to a water jet nozzle is guided and  
stretched. The wheel is mounted for movement with a slower moving  
carriage along the beam adjacent a faster moving carriage carrying the  
10 water jet nozzle. The slower moving carriage moves along the beam at  
speeds which are one half the speeds at which the faster moving carriage  
moves across the beam. During this movement of the second slower  
moving carriage, the wheel reels the hose thereabout to provide a  
travelling intermediate support for the hose. The hose wheel supports the  
15 weight of the hose and maintains it in alignment with the faster moving  
carriage so that less strain and stress is placed on the hose and the ends of  
the hose connected to the water jet nozzle during movement of the water  
jet nozzle across the beam. The water jet cutting apparatus has a preferred  
application as a tip cutting device in a reel turn-up application in a  
20 papermaking machine when two sets of faster and slower moving  
carriages are arranged for movement on opposite sides of the support  
beam to move towards each other in directions transverse to the web.

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